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(71) Applicant (for all designated States except US): **SABEUS PHOTONICS, INC.** [US/US]; 26679 West Agoura Road, Suite 100, Calabasas, California 91302 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **SCHMIDT, Siegmar** [US/US]; 1532 Violet Lane, Simi Valley, CA 93065 (US).

(74) Agents: **FITZGERALD, John, K.** et al.; Fulwider Patton Lee & Utecht, LLP, Howard Hughes Center, 6060 Center Drive, Tenth Floor, Los Angeles, CA 90045 (US).

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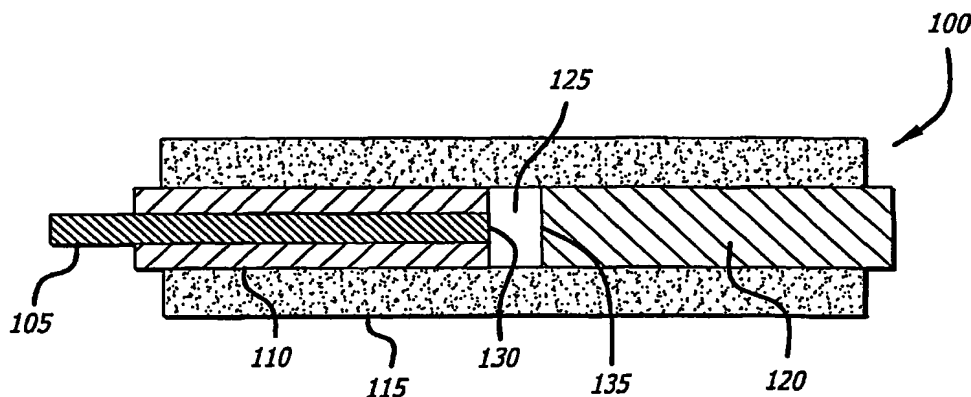
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(54) Title: **RUGGED FABRY-PEROT PRESSURE SENSOR**



(57) Abstract: A pressure sensor (100) and system for measuring pressure changes, especially in harsh environments, is described. The pressure sensor has a Fabry-Perot optical cavity formed within a tube (115) with a partial reflective mirror (130) provided by an end of an optical fiber (105) and a reflective mirror (135) provided by an end of a plug (120), with a gap (125) formed between. The pressure sensor may be disposed within a sensing chamber of a housing having an opening into the environment to be monitored. Alternatively, an isolator means may be used to isolate the sensor from the environment while communicating pressure changes to the sensing chamber. In another embodiment, the sensing chamber is filled with a compressible non-flowing material.